REMARKS

This Amendment and Response is submitted in reply to the Office Action dated March 17, 2006, in which the Examiner:

rejected claims 4-6 under 35 U.S.C. § 112, second paragraph, as indefinite; and

rejected claims 1-7 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 1,793,396 to Haentjens, or alternately by U.S. Patent No. 3,095,904 to Thaning.

Claim 8 having previously been cancelled, claims 1-7 are currently pending. This Amendment amends claims 1, 4, 5 and 7. Claims 1 and 7 are independent claims. Applicants traverse the rejections below.

Claims 4-6 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The Examiner alleged the recitation of "the end point" lacked proper antecedent basis in these claims. Applicants thank the Examiner for bringing this to our attention, and respectfully submit that the recitations of the amended claims have proper antecedent basis. Accordingly, Applicants respectfully request that the 35 U.S.C. § 112, second paragraph, rejection of claims 4-6 be withdrawn.

Claim 1 was rejected under 35 U.S.C. § 102(b) as anticipated by Haentjens. An anticipation rejection is improper unless a single prior art reference shows or discloses each and every claim recitation.

Claim 1 recites, in part, a flow control valve wherein when an actuating member is activated, flow forces from a flow of fluid will act upon an elastomeric element in an opening zone, forcing the elastomeric element in the flow direction.

Haentjens does not show or disclose each and every claim 1 recitation. For instance, Haentjens does not show or disclose that when an actuating member is activated, flow forces from a flow of fluid will act upon an elastomeric element in an opening zone, forcing the elastomeric element in the flow direction.

Flow in Haentjens' diaphragm valve proceeds from opening 13 to opening 12, via ports 14. (See lines 63-67; see also Fig. 2.) Flexible diaphragm 15, when drawn upwards by actuating rod 17, does not move from opening 13 towards ports 14 or opening 12. Instead, diaphragm 15 moves away from opening 13 *and* away from ports 14 and opening 12. Thus, Haentjens does not show or disclose flow forces forcing an elastomeric element in the flow direction, as recited by Applicants' claim 1.

Therefore, Haentjens does not show or disclose each and every claim recitation. Accordingly, Applicants respectfully submit that the rejection of claim 1 under 35 U.S.C. § 102(b) as anticipated by Haentjens is improper, and must be withdrawn.

Claims 2-6 were also rejected under 35 U.S.C. § 102(b) as anticipated by Haentjens. Claims 2-6 all depend, directly or indirectly, from claim 1 and include additional recitations thereto. Accordingly, Applicants respectfully submit that the rejection of claims 2-6 under 35 U.S.C. § 102(b) as anticipated by Haentjens is improper for at least the same reasons stated in connection with claim 1, and must be withdrawn.

Further regarding the rejection of claim 2 under 35 U.S.C. § 102(b) as anticipated by Haentjens, claim 2 recites the flow control valve of claim 1, wherein at least a part of said actuating member is able to move with said elastomeric element, so that when flow forces from the flow of fluid act upon the elastomeric element in the opening zone, the elastomeric element and at least a part of the actuating member are forced in the flow direction.

Haentjens does not show or disclose each and every of these additional claim 2 recitations. As discussed in connection with claim 1, the diaphragm 15 of Haentjens is not forced in the flow direction. Actuating rod 17 passes through boss 24 with a very close tolerance, and apparently could not be forced toward ports 14 and opening 12. Thus, unlike Applicants' claim 2, Haentjens does not show or disclose that at least a part of an actuating member is forced in the flow direction.

Therefore, Haentjens does not show or disclose each and every claim 2 recitation. Accordingly, the rejection of claim 2 under 35 U.S.C. § 102(b) as anticipated by Haentjens is improper for at least this additional reason.

Claim 1 was also rejected under 35 U.S.C. § 102(b) as anticipated by Thaning. An anticipation rejection is improper unless a single prior art reference shows or discloses each and every claim recitation.

Thaning does not show or disclose each and every claim 1 recitation. For instance, nowhere does Thaning show or disclose that when an actuating member is activated, flow forces from a flow of fluid will act upon the elastomeric element in an opening zone, forcing the elastomeric element in the flow direction.

However, the Examiner stated:

> The forces of the fluid flow are an inherent property of the fluid flowing and not limited by the structure of the valve device. (Office Action, p. 5.)

Applicants respectfully disagree. MPEP 2112 states the requirements for establishing inherent disclosure, as follows:

> In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. (MPEP 2112; internal citations and quotations omitted; emphasis in original.)

Applicants respectfully submit that the Examiner has not met this burden. Even if the Examiner is correct that "the forces of fluid flow are an inherent property of the fluid flowing," this statement has no bearing on whether the forces of the flowing fluid in Thaning's valve would necessarily force rubber plug 7 in the flow direction. Instead, the tendency of a given elastomeric element to move appreciably in the direction of fluid flow is affected by various factors, such as the particular geometry and resiliency of the member, as well as the design of elements surrounding the member.

Many design features of Thaning's valve argue against the assumption that rubber plug 7 would be forced in the flow direction (much less that rubber plug 7 would necessarily be forced in the flow direction). For example, Thaning states:

> ...the portion 8 of the plug extending through the bulbous portion 4 of the body is waisted as shown at 9 when in its normal unstressed condition so that curved fluid passageways 10 are formed between the plug and bulbous portion 4 of the body connecting the inlet 2 and outlet 3.... (Col. 1, lines 53-57.)

When the valve is opened, Thaning discloses that the plug 7 "will assume its normal waisted shape...." (Col 2, line 10.) The curved fluid passageways 10 thus appear to provide a pre-formed path of least resistance for fluid to flow around

the portion 8, thereby minimizing fluid pressure that would tend to force portion 8 in the flow direction.

Additionally, Thaning's valve includes guides 22 in the inlet 2 and outlet 3. Thaning discloses that guides 22:

> ...also fulfill a further purpose in that the ends 23 remote from the plug 7 are shaped to assist in maintaining a streamlined flow of fluid *around the plug 7* when the valve is in the open position. (Col. 2, lines 21-24; emphasis added.)

As may be seen most clearly in Figure 2, guides 22 appear to inhibit fluid flow from impinging directly on the plug 7, thus further reducing any tendency that portion 8 of plug 7 might have to move in the direction of flow.

Therefore, Thaning does not show or disclose each and every claim recitation. Accordingly, Applicant's respectfully submit that the rejection of claim 1 under 35 U.S.C. § 102(b) as anticipated by Thaning is improper, and must be withdrawn.

Claims 2-6 were also rejected under 35 U.S.C. § 102(b) as anticipated by Thaning. Claims 2-6 all depend, directly or indirectly, from claim 1 and include additional recitations thereto. Accordingly, Applicants respectfully submit that the rejection of claims 2-6 under 35 U.S.C. § 102(b) as anticipated by Thaning is improper for at least the same reasons stated in connection with claim 1, and must be withdrawn.

Further regarding the rejection of claim 2 under 35 U.S.C. § 102(b) as anticipated by Thaning, claim 2 recites the flow control valve of claim 1, wherein at least a part of said actuating member is able to move with said elastomeric element, so that when flow forces from the flow of fluid act upon the elastomeric

element in the opening zone, the elastomeric element and at least a part of the actuating member are forced in the flow direction.

Thaning does not show or disclose each and every additional claim 2 recitation. For instance, Thaning does not show or disclose that the elastomeric element and at least a part of the actuating member are forced in the flow direction. Instead, element 16 is moved up and down by turning spindle 11 and handwheel 12, and does not appear to be capable of moving in the flow direction.

Therefore, Thaning does not show or disclose each and every claim 2 recitation. Accordingly, the rejection of claim 2 under 35 U.S.C. § 102(b) as anticipated by Thaning is improper for at least this additional reason.

Claim 7 was rejected under 35 U.S.C. § 102(b) as anticipated by Haentjens, or alternately by Thaning. An anticipation rejection is improper unless a single prior art reference shows or discloses each and every claim recitation.

Claim 7 recites a flow control valve comprising a valve body having a control chamber formed within said valve body, the control chamber being in fluid communication with a fluid inlet passage and a fluid outlet passage, and an elastomeric element being placed inside said control chamber, wherein the elastomeric element has a control part placed eccentrically inside the control chamber.

Neither Haentjens nor Thaning shows or discloses each and every claim 7 recitation. For instance, neither reference shows or discloses that an elastomeric element has a control part placed eccentrically inside a control chamber.

Applicants note that the Examiner, in both the Haentjens and Thaning rejections, treats claims 1 and 7 together but does not address the distinctions

between these two independent claims, or state where in the prior art the claim 7-specific recitations are allegedly shown or disclosed. For example, the Examiner never states either where the references show or disclose the claim 7 recitation of a control part placed eccentrically inside a control chamber, or that claim 7 actually includes such a recitation.

As claim 7 has not been addressed in the outstanding Office Action, and as neither Haentjens nor Thaning shows or discloses each and every claim recitation, Applicants respectfully submit that the rejections of claim 7 under 35 U.S.C. § 102(b) as anticipated by Haentjens, or alternately by Thaning, are improper, and must be withdrawn.

Having traversed each and every rejection, Applicants respectfully request that the rejections of claims 1-7 be withdrawn, and claims 1-7 passed to issue.

Applicants respectfully submit that nothing in the current Amendment constitutes new matter. Claim amendments were made in response to Examiner's 35 U.S.C. § 112, second paragraph, rejection and for better conformity with current U.S. practice, and did not change the scope of the previous claims.

Applicants hereby petition for a one-month extension of time in order to file a Response to Office Action on the above-identified application. The fee of $120.00 required under 37 CFR 1.17(a) is enclosed.

If any additional extension of time for the accompanying response is required, Applicant requests that this paper be considered a petition therefor.

The Commissioner is authorized to charge any fees under 37 CFR 1.17(a) to (d), which may be required to Deposit Account No. 13-0235.

Respectfully submitted,

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